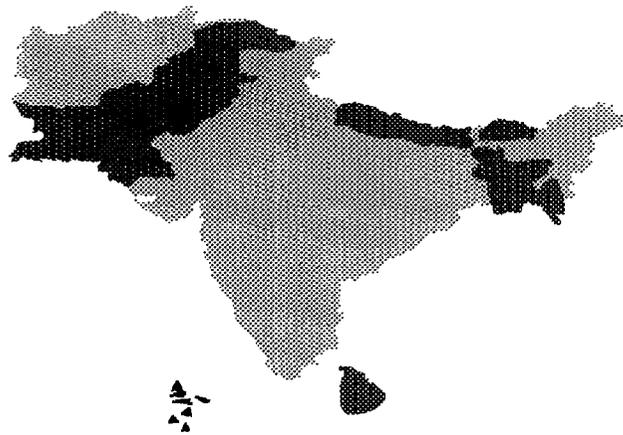


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**UNEMPLOYMENT IN SRI LANKA:
SOURCES AND SOLUTIONS**

Menaheem Prywes

The World Bank

July 1995

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**UNEMPLOYMENT IN SRI LANKA:
SOURCES AND SOLUTIONS**

Menahe Prywes

July 1995

ABSTRACT

Since the late 1970s, the labor market has functioned with enough flexibility to absorb an increased number of entrants while reducing the unemployment rate from around 24 percent in 1973 to about 14 percent in 1993. However, the labor market has not functioned flexibly enough to reduce the number of unemployed, which stood at about 830,000 in 1993. The most significant cause of unemployment of is probably the division of the labor market into protected, plantation, and unprotected segments (segmentation). The protected sector consists of the civil service, public enterprises excluding plantations, and part of the formal private sector. The high value of government-mandated wages and benefits and of job security in the protected segment, and possibly the social status of government employment, appear to motivate long-lasting search for employment by young and relatively well educated people. A government tendency to hire from the ranks of the unemployed may also encourage youth to remain unemployed. Since segmentation appears to be a major structural cause of unemployment, policies that reduce segmentation should reduce unemployment. The most important recommendation in this respect is to end the practice of hiring massive numbers of the unemployed into the public sector. Segmentation could also be reduced by limiting differences in job security between the protected and unprotected segments. The most important reform in this regard would be to amend the Termination of Employment Act (TEWA) which prevents employers from declaring workers redundant for economic reasons.

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EXECUTIVE SUMMARY AND INTRODUCTION

1. Since the late 1970s, the labor market has been operating in a relatively strong economy where growth has been driven by the expansion of industry and of exports. In this context, the labor market has functioned with enough flexibility to absorb many labor force entrants into employment. The functioning of the labor market is visible in wage developments: real wages have been broadly stable since the late 1970s, which has proved compatible with a sharp decline of the unemployment rate from around 24 percent in 1973 to about 14 percent in 1993 (Table 1). This was a remarkable achievement considering that the labor force grew rapidly because of an impressive increase in women's participation and because high fertility in the past increased the potential size of entering cohorts. However, the labor market has not functioned flexibly enough to absorb so many entrants and reduce the number of unemployed, which stood at about 830,000 in 1993.

	<u>Levels</u> (thousands)	<u>Rates</u> (in percentage points)
Population a/	17,600	growth: 1.2
Labor force b/	6,032	labor force/active population: 49.1
Employment b/	5,201	employment/labor force: 86.2
Unemployment b/	831	unemployment/labor force: 13.8

a/ All nine provinces. b/ Excludes northern and eastern provinces. Source: Labor Force Survey, Department of Census & Statistics.

2. The most significant source of inflexibility and of unemployment is probably the division of the labor market into protected, plantation, and unprotected segments (segmentation). The high value of government-mandated wages and benefits and of job security in the protected segment, and possibly the social status of government employment, appear to motivate long-lasting search for employment by young and relatively well educated people. A government tendency to hire from the ranks of the unemployed may also encourage youth to remain unemployed. The best example is the occasional mass hiring of teachers from among the ranks of unemployed school-leavers. This tendency may be reinforced by social transfer programs that raise the reservation wage. Thus there is a voluntary aspect to this kind of unemployment which is linked to government policies.

3. Segmentation is unlikely to explain unemployment among poor and relatively uneducated people who do not qualify for employment in the protected segment. A possible explanation of this kind of unemployment is the web of constraints faced by the poor in terms of education, health, lack of assets, physical isolation and isolation from information. However, more research appears necessary to understand the interaction of poverty and unemployment. The difficulty experienced by plantation workers in finding employment in non-plantation areas may also explain some unemployment of the poor. Moreover, limited mobility of women between occupations and industries also contributes importantly to unemployment. The very high unemployment rate among women also warrants additional investigation.

4. Since segmentation appears to be a major structural cause of unemployment, policies that reduce segmentation should reduce unemployment. The most important recommendation in this respect is to end the practice of hiring massive numbers of the unemployed into the public sector --which is the leading wedge of the protected segment. This is an ineffective way to reduce unemployment because it backfires by encouraging young school-leavers to search for government employment rather than adapt themselves to the needs of private employers and then search for and accept private employment. The occasional and seemingly random nature of massive government hiring encourages unemployment by nurturing the expectation that employment in the Government could be achieved at any time. Extended efforts to find work in the Government also feeds the frustration of youth and can be potentially destabilizing. The fiscal cost of salaries and pensions for the extra civil servants can raise interest rates and may crowd-out investment in the private sector and therefore the absorption of unemployment by the private sector. The Government could also discourage extended search by eliminating any government preference for hiring from the ranks of the unemployed and by linking public sector wages to private sector comparators.

5. Segmentation could also be reduced by limiting differences in job security between the protected and unprotected segments. The most important reform in this regard would be to amend the Termination of Employment Act (TEWA) which prevents employers from declaring workers redundant for economic reasons and thus obliges employers to pay large settlements for voluntary departures. These costs discourage hiring in existing enterprises and also discourage employment-creating investment by obliging businesses to bear the risk of paying large settlements. An amendment could set an upper bound to severance pay while providing for a reasonable minimum period of advance notification of severance to the employee. It would also be helpful to explicitly exclude workers on short-term contracts and trainees from coverage of the TEWA. Amendment would increase turnover, but would reduce youth frustration by reducing the duration of employment and giving youth an entry point into employment.

6. A final recommendation is to expand public expenditures in high-return and labor intensive areas such as the maintenance and rehabilitation of roads and irrigation canals. To avoid increasing the deficit, these activities should be financed by cuts in current expenditures or increased revenues. A sustainable increase in such low-wage employment would support those in low and middle income levels while contributing importantly to long-term development.

TABLE 2						
LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT ^{a/}						
(percentage point growth per annum)						
	1971-81			1981-93		
	Total	Male	Female	Total	Male	Female
Labor Force	2.5	2.3	2.9	1.9	1.1	3.7
Employment	2.9	2.5	4.3	2.2	1.5	4.1
Unemployment	0.2	0.7	-0.3	0.1	-1.2	2.0

^{a/} Estimates for all 9 provinces. Source: Alailima (1992), Dept. of Census, World Bank.

7. **Labor market developments.** The Sri Lankan labor market has successfully provided large numbers of jobs in the context of relatively strong growth. Over 1981-93, employment rose by 1.4 million

and by 2.2 percent per annum while real GDP growth was 4.5 percent per annum. So employment grew by about half a percentage point for every percentage point of growth. Employment has grown faster than the labor force even though the labor force has grown rapidly (Table 2). Moreover, the number of unemployed hardly rose. These tendencies were also present over 1971-81, which covers the period of interventionist policy in the early and mid-1970s.

8. The labor force. The labor force increased rapidly because of the changing age structure of the population and because of an impressive increase in the female participation rate. The high crude birth rates experienced in the 1960s and 70s increased the size of work-age cohorts over 1981-93. The crude fertility rate, for example, was about 30 during the 1970s compared to about 20 in 1992. More importantly, the female participation rate rose by about 30 percent over 1981-93 to about a third of the active population (defined as the household population over 10), while the male rate was roughly constant at two-thirds (Table 3).

9. Employment. The impressive growth of the female labor supply was exceeded only by the growth of female employment (Table 2). The share of women in total employment increased from about 20 percent in the early 70s to about a third by the early 1990s --even though these figures exclude female employment abroad. Through this process, the ratio of males to females in employment fell from 3 in the early 1970s to 2 by the late 1990s and the ratio in manufacturing declined from 2.0 to 1.2.

Age	Male		Female	
	1980/81	Q4 1993	1980/81	Q4 1993
Total (all ages)	66.8	66.1	25.8	33.3
10-14	5.5	4.2	3.1	1.8
15-19	41.9	35.9	20.6	19.7
20-24	86.8	77.8	39.0	58.5
25-29	90.0	94.4	36.8	50.0
30-34	96.4	97.6	33.9	47.8
35-39	97.0	98.9	35.8	53.7
40-44	96.2	95.7	36.1	45.5
45-49	95.3	92.3	33.6	37.3
50-54	90.1	89.1	28.3	35.1
55-59	79.1	73.7	21.1	19.2
60+	53.3	45.0	9.8	6.3

Source: Alailima (1992) and Dept. of Census, Labor Force Survey.

	<u>1971</u>	<u>1981</u>	<u>Q4 1993</u>
Agriculture	50.1	45.5	38.5
Mining & quarrying	0.4	0.8	2.2
Manufacturing	9.3	9.9	13.2
Construction	2.8	3.3	4.9
Electricity & gas	0.3	0.4	0.6
Transport, storage	4.9	4.8	4.1
Trade & commerce	9.4	10.6	11.0
Banking, Insurance, and real estate	0.7	1.4	1.4
Personal services a/	13.5	14.3	20.9
Not defined	8.6	9.0	3.1
Total	100.0	100.0	100.0

a/ Includes teachers, military, some other public sec. employees. Source: Rodrigo , Labor Force Surveys, Census.

<u>Age</u>	<u>Male</u>	<u>Female</u>
All ages	10.2	21.0
10-14	34.8	46.9
15-19	32.5	33.5
20-24	28.4	41.1
25-29	11.9	26.3
30-34	5.8	23.0
35-39	4.6	3.4
40-44	2.6	10.4
45-59	3.5	5.6
50-54	3.2	0.0
55-59	2.5	0.0
60+	0.8	0.0

Source: Dept. of Census, Labor Force Survey.

10. The growth of male as well as female employment has been associated with a relatively rapid expansion of exports, industry, and the private sector. Most of the increase of real GDP has been in the private sector. Employment in the broadly defined public sector grew through the 1970s and 1980s and

then declined after 1989 because of the privatization of many state enterprises and a retrenchment of the central government civil service in 1990-91. Since 1991, the central government has renewed its large scale hiring. Employment has been generated in personal services (which includes a large part of the civil service and the military), manufacturing, and in mining and manufacturing (Table 4). Over the same period employment shifted out of agriculture and the miscellaneous 'undefined' industrial category. Despite the robust increase in employment, the level of unemployment has edged upward as the labor force increased faster than the population (Table 2).

11. **Unemployment.** Unemployment is concentrated among youth aged 15 to 29 (73 percent of the total), women (50 percent), and relatively educated people (53 percent). Statistical reports show extraordinarily high rates of unemployment for youth aged 15 to 19 and 20 to 24 who are entering the labor market for the first time, and for women in those age groups (Table 5). A calculation made from Labor Force Survey for 1985-86 shows that unemployment rates for people with secondary school General Certificates of Education, at the 'O' or 'A' level were exceptionally high (Table 6). In late 1993, 29 percent of the unemployed had 'O' level certificates and a further 24 percent had 'A' level certificates or tertiary education (Table 7). These young school-leavers experienced great difficulty in entering the labor market. Over three-quarters of the unemployed remain unemployed for over a year while the duration of unemployment is relatively low for people who are not first time job-seekers.

TABLE 6			
UNEMPLOYMENT RATE			
BY LEVEL OF EDUCATION AND GENDER: 1985-86			
(in percentage points)			
Level of education	Total	Male	Female
Overall	14.1	10.8	20.8
No schooling	6.1	7.7	4.8
Grade 1-4	7.7	7.0	9.4
Grade 5-7	11.2	9.5	16.5
Grade 8-9	20.8	15.4	34.9
'O' level	22.3	14.4	35.6
'A' level	32.0	18.7	44.9
University degree	6.3	3.3	10.2
Post graduate degree	3.9	4.2	3.2

Source: Bowen (1990), based on Labor Force Survey of 1985/86.

Level of education	Employed	Unemployed
No schooling	5.3	1.4
Grade 1-4	19.7	7.0
Grade 5-9	46.9	39.0
'O' level	16.3	28.8
'A' level and higher	11.8	23.9
TOTAL	100.0	100.0
Source: Department of Census, Labor Force Survey.		

12. Error in measurement of the unemployment. The large size and peculiar composition of unemployment raise questions about whether unemployment is measured accurately. This is a significant issue because it could be expensive to attempt to resolve a non-existent or exaggerated problem.

13. The most common argument is that employment is over-stated because it includes many under-employed people who should be considered unemployed, so that the unemployment as defined by the Census, is under-stated. In the Census Labor Force Survey, "a person who works for pay, profit, or unpaid family gain for one hour or more during the past week is considered to have been employed during that period."¹ The Survey found that about 15 percent of employed workers worked for less than 20 hours a week (Table 8). If unemployment were re-defined to include these people then the aggregate unemployment rate would rise to 27 percent. However, this would probably not be an appropriate definition of unemployment since many people appear to chose to work less than 20 hours per week. Much of this under-employment is concentrated in the rural sector and among women and appears linked to seasonal patterns in agriculture and to decisions to care for family during seasonal trough periods.

19 hours or less	15.7
20 to 39 hours	24.4
Over 40 hours	59.9
Total	100.0
Source: Dept. of Census, Labor Force Survey.	

14. It is possible that unemployment among women might be mis-measured because of the difficulty of distinguishing between housework and unpaid household employment in activities such as artisan work and paddy cultivation. However the question posed by the Census appears clear and there is no evidence of any bias in measurement. The transfer programs are more likely sources of measurement error.

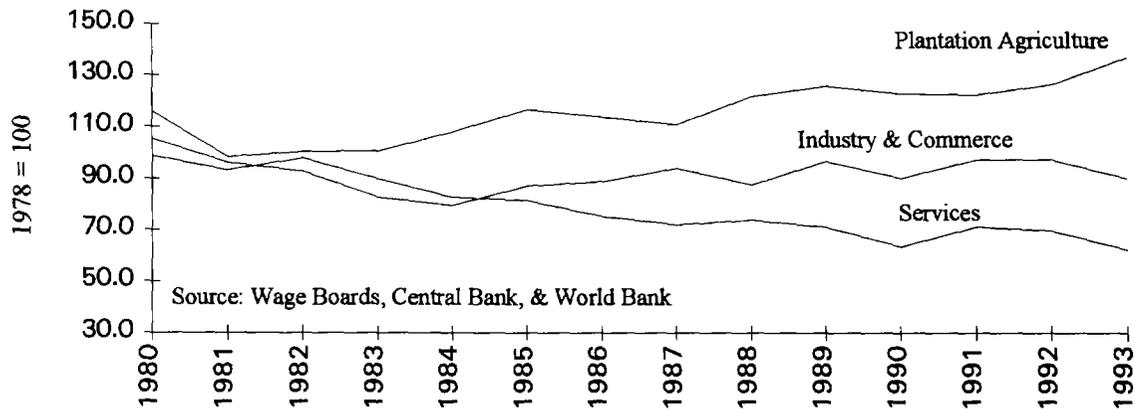
¹/ Department of the Census, Sri Lanka Labor Force Survey: Fourth Quarter 1993. p. 45.

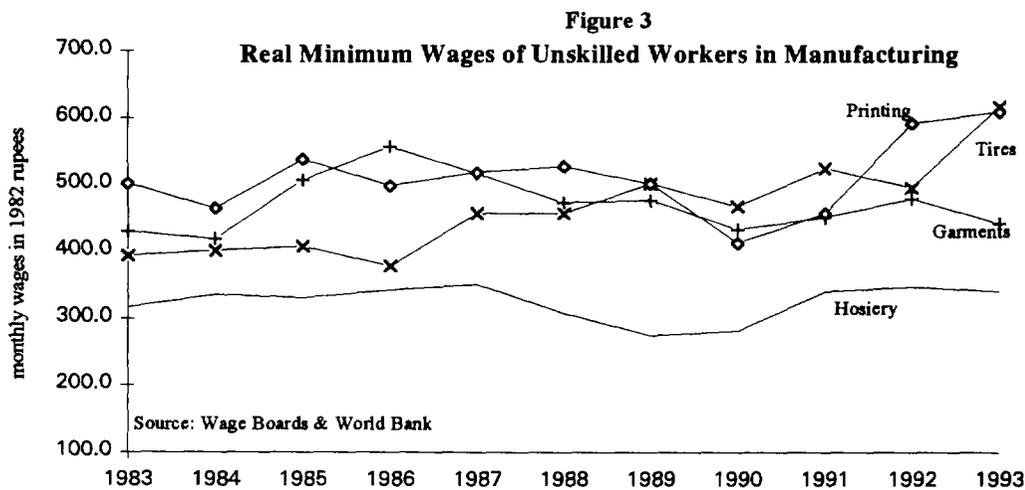
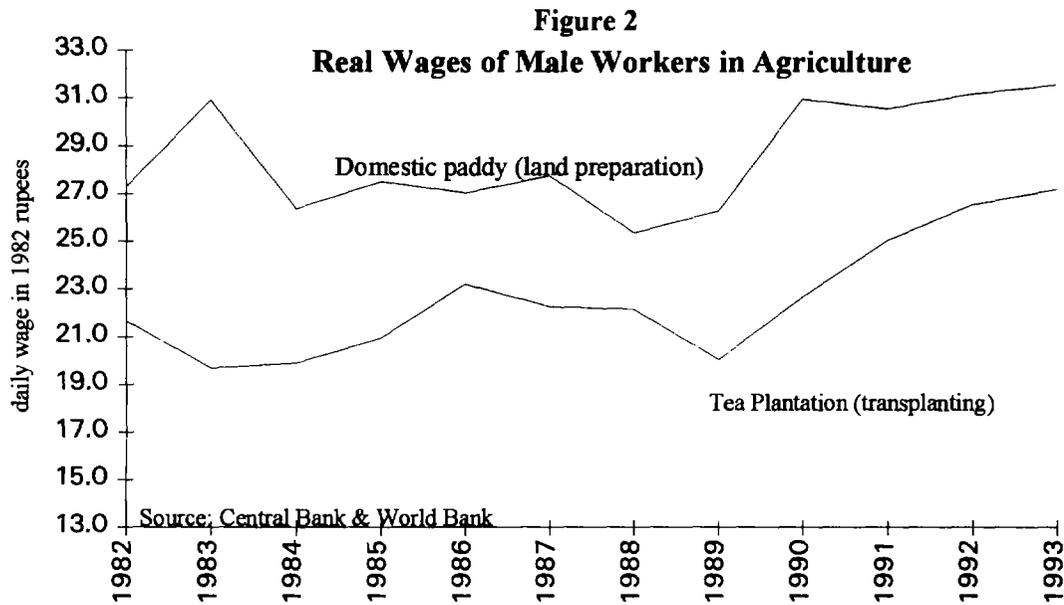
Unemployment among recipients of social transfers such as Janasaviya and Food Stamps is probably overstated because of fear that reporting employment will lead to loss of the transfers. Census officials report difficulty in getting accurate responses to income questions for this reason, but relatively little difficulty with the Labor Force Survey. Some school-leavers may also mis-report unemployment to preserve their eligibility for government programs aimed at absorbing the unemployed --such as the hiring of teachers.

15. So there are reasons to believe that unemployment among the poor and youth is over-stated and some evidence that the unemployment rate should be redefined to include most involuntary under-employment. However, it is doubtful that this rate would be much higher: if it were as large as 27 percent, real wages should be falling rapidly.

16. Wages. The available wages series do not show an overall downward trend. There are two sets of wage data: minimum wages published by the Labor Commissioner and a survey of actual wages in several occupations published by the Central Bank. Unfortunately, neither are good measures of the overall returns to labor because they do not include the value of either job security or non-wage benefits such as pensions. Minimum wages are set by a tripartite board composed of representatives of labor, management, and the Government on the basis of actual wages in each occupation. Judging by the lack of complaint from industry sources, the minimum wages do not appear to be binding. But it was not possible to verify this because of the absence of comparable data on actual wages in these occupations. The Central Bank data on actual wages are only for daily wage rates in casual employment in domestic paddy and in construction.

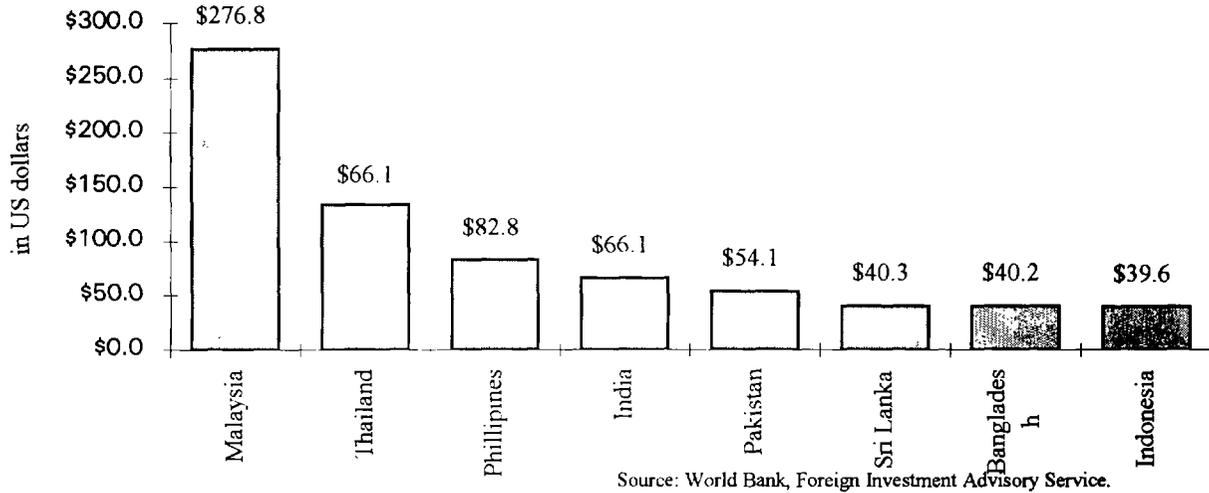
Figure 1
Real Minimum Wage Indexes by Sector





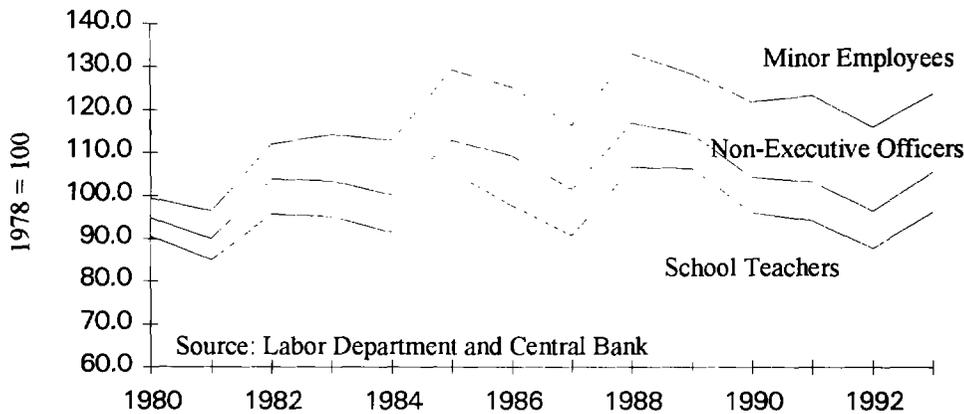
17. Data from both sources show stable overall wages and a rise in agricultural wages relative to other sectors. The real minimum wage index in plantation agriculture has been on an upward trend while the index for the industrial and commercial sector has been flat and the index for services have been on a downward trend (Figure 1). The Central Bank data show a slow upward trend in real wages in casual laborers in domestic paddy since 1989, consistent with the trend for plantation agriculture (Figure 2).

Figure 4
Monthly Wages of Factory Workers in 1991:
An International Comparison



18. More detailed data on minimum wages may provide some insight into the evolution of the economy. Real minimum wages in most of the important manufacturing industries have been broadly flat (Figure 3). The limited data comparative data available for the garment industry suggests that Sri Lankan manufacturing is internationally competitive (Figure 4). Real wage developments in the Central Government varied according to the type of employee, with low-skilled labor experiencing real wage increases and higher skilled labor and teachers experiencing real wage stagnation. Moreover, wage developments in Government have been cyclical, with increases tending to come before elections (Figure 5).

Figure 5
Real Wage Indexes for Government Employees



19. Explanations of unemployment should be consistent with these data on wages and unemployment. However, analysis of a labor market may run askew if it depends entirely on official statistics and on the views of experts. So it is worthwhile to seek out the views of ordinary participants in the labor market (Box 1).

Voices from the Labor Market

A small team from the University of Colombo conducted a small and rapid survey of 100 adults in the Greater Colombo area for this study. The survey was not intended to represent the national labor market; instead, the purpose was to hear the voices of ordinary participants in the labor market and to provide an independent reality check for the hypotheses of this study.

About a quarter of the respondents were unemployed (compared to 14 percent in the Labor Force Survey) and 10 percent were students. The employed workers had relatively unstable employment but were not severely under-employed. Half were in temporary or casual employment, but nearly all of these worked more than 20 hours a week.

A bit more than half of the sample were seeking a government job. The main reasons given were that the jobs are permanent and pensionable. Searchers for government jobs also displayed striking resolve: about half had been searching for more than a year; 60 percent declared themselves willing to search for up to another year, and a further 25 percent were willing to search for up to a second year. Most of these respondents said that their families were paying their living expenses while they were unemployed.

A remarkable 70 percent of women were looking for a government job --compared to about 30 percent of the men. In contrast, many women appeared eager to avoid or leave employment in the garment industry. Many explained that earnings are not high enough to meet expenses (that were typically under Rs 2,000 per month), especially considering the high cost of housing near factories, and that working conditions were difficult.

Box 1

20. **The segmented labor market.** Barriers erected by modern governments or inherited from the past divide the labor market into segments which offer very different rewards to workers and job seekers. In the protected segment, workers benefit from the enforcement of government policies that provide advantages such as job security, high wages, and generous pensions. Judging by participation in pension schemes, about 25 percent of workers are in the protected segment. The segment is composed of about a fifth of the private sector, the civil service, the military, and the state enterprises (excluding the plantations). About 8 percent of employment is in the plantation sector. These workers also benefit from certain government protections but receive lower incomes and are less mobile than workers in the protected segment. The remaining workers are in the unprotected segment, which is concentrated in agriculture, services, and parts of manufacturing.

21. **The protected segment.** The Government either sets or regulates wages and non-wage benefits in the protected segment; indeed the Government itself is probably the most privileged part of the protected segment. An econometric study by Bowen, that attempts to adjust for the sources of wage variation such as the level of skills, finds a government sector wage premium of 128 percent of non-government wages.²

²/ Alex Bowen. *The Unemployment Problem in Sri Lanka*. photocopy, 1990.

Civil servants in the lower skill grades are paid more than in the private sector, although professionals are paid less. The Government also appears to be the wage leader: Rodrigo documented the role of the government in setting the amount and timing of wage increases in the private sector.³ Wages, however, are an inadequate indicator of the incentive to work in the protected segment since there are substantial non-wage benefits.

22. The most important non-wage benefits are the retirement funds. Civil Servants benefit from a Pension Fund, that pays a pension (or a lump sum settlement) on retirement, and a Widows and Orphans Protection Fund. The Government pays all retirement benefits from the Pension Fund on a pay-as-you-go basis; benefits from the Widows & Orphans Protection Fund are financed partly by the Government and partly by civil servant contributions of 3 to 6 percent of wages. An Employee Provident Fund (EPF) and Employee Trust Fund (ETF) benefit employees of state-owned enterprises and private companies, except for family-owned enterprises and the self-employed. The EPF is financed by employer contributions of 12 percent of the wage bill and employee contributions of 8 percent; employers also contribute 3 percent to the ETF. Combining the three payments brings the total social security tax rate borne by both firms and labor in the state enterprises and the private sector to 23 percent. Employers must hold another 4.5 percent of wages in reserve under the Gratuity Act of 1983. Together these payments impose impressive costs on employers. But the benefit to employees is limited because the indirect impact on the growth of employment of the social security tax and of the investment of the revenues in government debt.

23. Job security in the protected segment is another important attraction. A system of labor tribunals established in 1957 protects employees against unjust dismissal for disciplinary reasons. More significantly, the Termination of Employment of Workmen Act (TEWA) of 1971 prevents employers from laying-off workers for non-disciplinary reasons without either obtaining their agreement or the prior written approval of the Commissioner of Labor. The TEWA covers lay-offs motivated by the down-sizing or closing of a business and even termination on the grounds of incompetence and prolonged illness. It is usually not possible to obtain permission for redundancies from the Commissioner of Labor so that down-sizing obliges employers to offer large settlements for voluntary retirement. The Labor Tribunals and the TEWA cover the state enterprises and the private sector --in principal. There are many reports that the TEWA is not always enforced in parts of the private sector, or can sometimes be avoided by keeping employees on short-term contracts or by encouraging high turnover.

24. Employees in the protected segment also benefit from 26 public holidays per year, and often from the two day weekend common in wealthy industrial countries. Another advantage is that overtime and work on public holidays is remunerated at 1 and 1/2 times the standard rate.

25. The plantation segment. The plantation segment resembles the protected segment in the degree of government intervention. It consists of two large state enterprises that produce tea, rubber, and some coconut for export.⁴ Together, the plantations employ about 450,000 workers and support a total population of more than two million. These are mainly the descendants of Tamils recruited in India during the colonial era. Employees in the segment are protected by the Government and by an effective trade union. However the segment is not protected in the sense that income levels and housing is poor. The average wage in plantation agriculture was about 80 rupees per day in 1993, compared to about 95 for

³/Chandra Rodrigo. Structural Reforms and the Labour Market, 1977-92: Sri Lanka Case Study. University of Colombo, 1993. Chart 1, p. 41.

⁴/The Janatha Estate Development Board (JEDB) and the State Plantation Corporation (SPC).

casual labor in domestic paddy --itself a relatively poorly paid occupation. Moreover, it is difficult for the employees to find jobs outside the plantations because ethnic tensions hinder settlement in majority areas.

26. Lack of mobility is a major problem because there is substantial excess employment in the plantations. The Sri Lanka state tea plantations employed 3.2 workers per hectare in 1991 compared to 2.5 in South India and 2.2 in Kenya. One reason is that the union has managed to assure hiring of children of employees and a guaranteed six-day work week. The main reason however is that anticipation of nationalization and actual nationalization reduced the incentive to plant, so that production capacity tended downward for several decades. Tea production fell from 214 million kgs in 1975 to 179 in 1992 and rubber production fell from 149 million kgs to 105 in 1992. Since June 1992, most of the state plantation lands have been managed under contract by 22 private companies --in part to restore incentives to plant. But insufficiently long contracts and government intervention in wage setting now limit the incentive to plant.

27. The unprotected segment. The unprotected segment covers about 3.4 million employees in the private segment. Employment in the segment is concentrated in casual agricultural labor, in agricultural small holdings, in other self-employment, in small business in general, and in parts of manufacturing. In general, these are enterprises that set wages relatively free of government control and that evade or avoid the TEWA.

28. Moreover, most employees in the unprotected segment do not benefit from the EPF and the ETF on retirement because their employers do not make contributions --even though most private sector employers are legally obligated to contribute. The main exemptions are for unpaid family workers and the self-employed. In 1993, employers made EPF contributions for 1.3 million workers out of a total of about 4.7 million employees in the state enterprises and private sector. The state-owned enterprises (which are in the protected sector) probably made contributions for their employees. Under this assumption, private sector employers made contributions for less than a fifth of their employees.

29. **Hypotheses about the sources of unemployment.** Wages would adjust to assure full employment in an idealized labor market without impediments such as segmentation. Hypotheses about employment must thus explain how specific structural features of the market, including those which may be introduced by the Government, lead to open unemployment. There are at least four hypotheses about structural causes of unemployment that arise in the labor market:

- Queuing
- Mismatch
- High relative cost of labor
- Poverty syndrome

30. Queuing. The queuing hypothesis is that young school leavers conduct an extended search for scarce jobs in the protected segment, and especially in the government and state enterprises. Their search is motivated by superior wages and benefits set by law or regulation and by a high degree of job security compared to the unprotected segment. Such an extended search lengthens the duration of unemployment but can nevertheless be understood as rational: the advantages of employment in the protected segment are high enough to justify search for these jobs even when the probability of employment is relatively low. Extended search by relatively poor youth (by international standards) is possible because families support the search as a form of investment in human capital.

31. The queuing hypothesis for Sri Lanka follows some of the themes of Harris and Todaro, and Glewwe is perhaps the best known proponent.⁵ Glewwe, and authors such as Dickens and Lang, argue that queuing behavior has been reinforced by the hiring practices of the government. For instance, education requirements for most government jobs increase unemployment as youth study for and retake tests for the 'O' and 'A' level certificates. More importantly, the practice of hiring from the ranks of unemployed school-leavers provides an incentive to remain unemployed while searching for work. One example of this kind was the recent hiring of teachers from among the ranks of unemployed school-leavers.

32. Mismatch. The mismatch hypothesis, in its strongest form, is that educated youth, such as 'O' and 'A' level certificate holders, refuse employment in blue collar occupations, while employers cannot fill vacancies in some skilled occupations. The term mismatch, however, is often used to refer to weaker versions of the hypothesis. One is that educated youth expect employment in white collar occupations. This would mean that they prefer white collar occupations and would require a premium to persuade them to accept blue collar employment. This weaker version of the mismatch hypothesis merges with the queuing hypothesis, since most white collar jobs are in the protected segment and many blue collar jobs are in the unprotected segment. Without payment of a sufficient premium for employment in the unprotected segment, educated youth would presumably search for employment in the protected segment. The mismatch hypothesis originates with the report of an International Labor Organization mission in 1971 and is significant for policy because it helped persuade the Government to launch a broad and continuing array of vocational education programs.⁶

33. Relative price. The relative price of labor hypothesis is that government policies that increase the cost of labor relative to capital induce investment in labor-saving and capital-intensive manufacturing technology, and thus slow the growth of employment. The main policies that increase labor costs are restrictions on redundancies (the TEWA) and the 23 percent social security (EPF and ETF) tax rate on wages--including both employer and employee contributions. It is sometimes argued that duty freedom on the import of capital goods used in export industries also leads to lower growth of employment because it raises the relative price of labor relative to capital. Policy measures that lower the cost of capital to the private sector, such as interest-subsidies, would also raise the price of labor relative to capital.

34. Poverty syndrome. The hypotheses above focus on unemployment among relatively mobile and educated workers. In contrast, the poverty syndrome hypothesis focuses on the web of constraints faced by poor and relatively uneducated persons. The hypothesis is that poor education, poor health, lack of assets, poor infrastructure, and isolation from employment and from information about employment sometimes combine to cause unemployment.

35. For instance, a landless and poorly educated person living in a rural hamlet that is isolated by poor quality roads may remain unemployed because he does not have information about employment opportunities outside the hamlet and because he cannot reach available employment. Another possibility is that disease is more likely to debilitate a person to the point that he cannot find employment if he does not seek treatment or seeks inappropriate treatment because of poor education, if he cannot reach medical assistance because of poor roads, or if he does not have assets to sell in order to buy medicines.

⁵/ John Harris and Michael Todaro. "Migration, Unemployment and Development: A Two-Sector Analysis." American Economic Review, 60, 1970, pp 126-42 and P.W. Glewwe. An Analysis of Income Distribution and Labor Markets in Sri Lanka. unpublished PhD dissertation, Stanford University, 1985.

⁶/ D. Seers. "Matching Employment Opportunities and Expectations." International Labor Organization, Geneva, 1971.

36. **Assessment of alternative explanations of unemployment.** The criteria for assessing the alternative hypothesis is consistency with the evidence, and in particular with employment, unemployment, and wage developments.

37. Assessment of the queuing hypothesis. The queuing hypothesis should have considerable importance in explaining unemployment because it is consistent with all the available evidence. For instance, the hypothesis would predict that abundant employment opportunities in the protected sector would be associated with low growth of employment in the unprotected sector. Over 1971-83 employment in the entirely protected public sector grew at an 8 percent annual rate while employment in the largely unprotected private sector grew at a 1 percent rate. Moreover, the hypothesis predicts that unemployment will be concentrated among young labor market entrants that are seeking the advantages of lifetime employment in a protected segment job. The Labor Force Survey confirms the tight relationship between unemployment and youth: about three-quarters of the unemployed are between 15 to 29 years old and unemployment rates for sub-groups in this age range are strikingly high (Table 5).

38. Furthermore, the hypothesis predicts that youth will struggle for the 'O' and 'A' level certificates that are often required for employment in the protected segment --the 'O' level certificate is a minimum requirement for employment in the civil service. The high rate of second and further sittings for the 'O' and 'A' level exams is therefore consistent with the hypothesis. The hypothesis is also consistent with the high level of unemployment among educated youth compared to other groups: unemployment is concentrated among 'O' and 'A' level certificate holders and unemployment rates of these groups are also strikingly high (Tables 7 and 6). In contrast, unemployment rates are surprisingly low for poorly educated persons that are unlikely to queue because they would not qualify for jobs in the protected segment.

39. The hypothesis would also predict extended search by educated persons for white-collar occupations that are commonly found in the protected segment. The evidence from the Survey is consistent with the hypothesis: about 90 percent of the unemployed who aspire to white collar occupations such as managers, professionals, and clerks remain unemployed for over a year, compared to about three-quarters of the total unemployed. An unpublished computation by the National Planning Department of the duration of unemployment by education level shows a potentially inconsistent result. The duration of unemployment is about the same for 'O' and 'A' level certificate holders as for those with less secondary education. But this need not contradict the queuing hypothesis as the extended job searches of the two groups may have different explanations: the former search for privileged segment jobs while the latter do not enter employment for education-related, or some other, reasons.

40. Education levels have been changing with the population structure. The retirement of small cohorts of less educated older people and the entry of larger cohorts of relatively educated youth increases the proportion of the labor force that has the educational qualifications for employment in the protected segment. The queuing hypothesis is consistent with a rise in wages in the unprotected segment when the labor force becomes younger and better educated. This should be evident in the agriculture sector, which forms much of the unprotected and plantation segment.

41. There is evidence that wages have been rising in both domestic and (export-oriented) plantation agriculture as employers seek to attract and retain members of this changing labor force. There is evidence of an upward trend in real relative agricultural wages. Real wage rates, as measured by the minimum wage, have risen in the plantations compared to the industry and service sectors and actual wages in domestic paddy have also risen (Figures 1 & 2). The data on domestic paddy provide better evidence of the relative wage increase since they are actual and since there is over-staffing and limited mobility of permanent laborers in the plantations. However, increase of wages in plantation sector is probably at least partly linked to competition with domestic agriculture for casual labor.

Government	3.3
Family	90.0
Income from Assets	2.3
Dis-saving	3.2
Sale of assets	0.3
Misc.	0.4
None required	0.5
Total	100.0
Source: Dept. of Census, Labor Force Survey.	

42. One might suppose that the unemployed in Sri Lanka would be too poor to remain voluntarily unemployed. The evidence from the Labor Force Survey is that the unemployed can queue largely because they are supported by their families (Table 9). Families that can afford to support a child's extended job search are probably not poor. Indeed, calculations made for the recent Poverty Assessment imply that about two-thirds of households with unemployed persons are above the poverty line.⁷ Many non-poor parents probably support their children's extended search for employment in the protected segment as a form of investment in human capital. The lifetime flow of earnings for 'O' and 'A' level certificate holders that do find jobs may be high enough to justify investment in extended search (Figure 6). Kelly calculated a rate of return of 24 percent to average annual lifetime discounted earnings for 'O' level certificate holders that gain the 'A' level.⁸

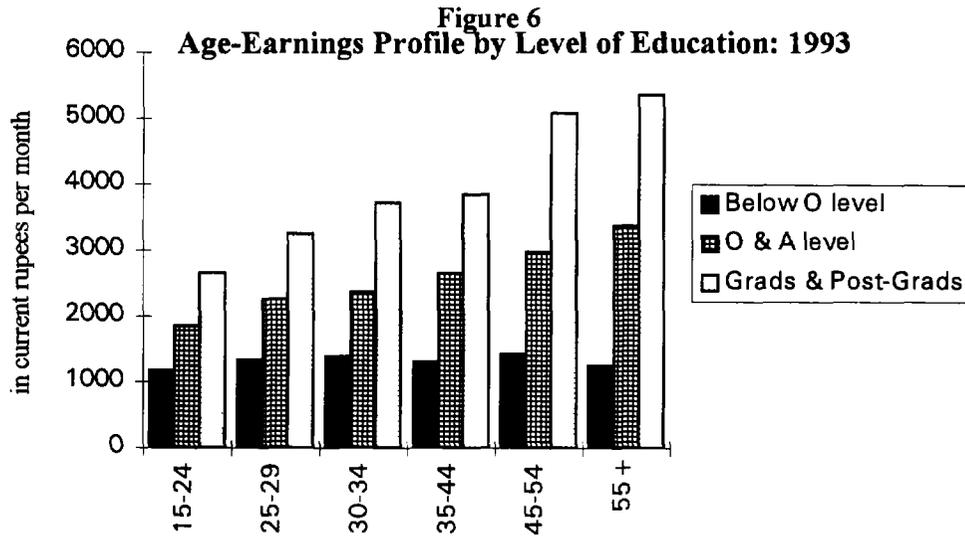
43. There are several possible challenges to the queuing hypothesis. One is to ask why persons searching for jobs in the protected segment do not take temporary jobs. The high return to full time search for employment in the protected segment may explain why some youths did not take other jobs. Some may wish to remain unemployed because the Government sometimes prefers to hire from the ranks of the unemployed: it recently hired teachers from a list of unemployed school-leavers. It is possible that some youths did accept casual employment while searching for employment in protected segment, but reported themselves as unemployed to improve their chances of receiving a government job. Moreover, some youths may have been counted as unemployed while studying for 'O' and 'A' level exams, but after they had stopped attending regular classes.

44. A final challenge is to assert that hiring in the protected segment has been too small to offer credible hope of employment to a large number of people. Queuing would then become a marginal

⁷ World Bank. Sri Lanka Poverty Assessment. Report no. 13431-CE, January 11, 1995.

⁸ Terence Kelly. "Monthly Earnings in Sri Lanka." Department of National Planning Discussion Paper, July 1993.

phenomena. However, the evidence is that broad public sector hiring between 1979 and 1989 (excluding the state plantations) varied between 30 to 50 percent of entrants into the labor force so that search has a reasonable chance of succeeding (Figure 7). Public sector hiring then turned negative as the Government attempted a civil service reform in 1990-91 and privatized a number of state enterprises. However central government hiring has surged over 1992-94 and now amounts to about 25 percent of labor force entrants (Figure 8).



Source: Census, Kelley (1992). age

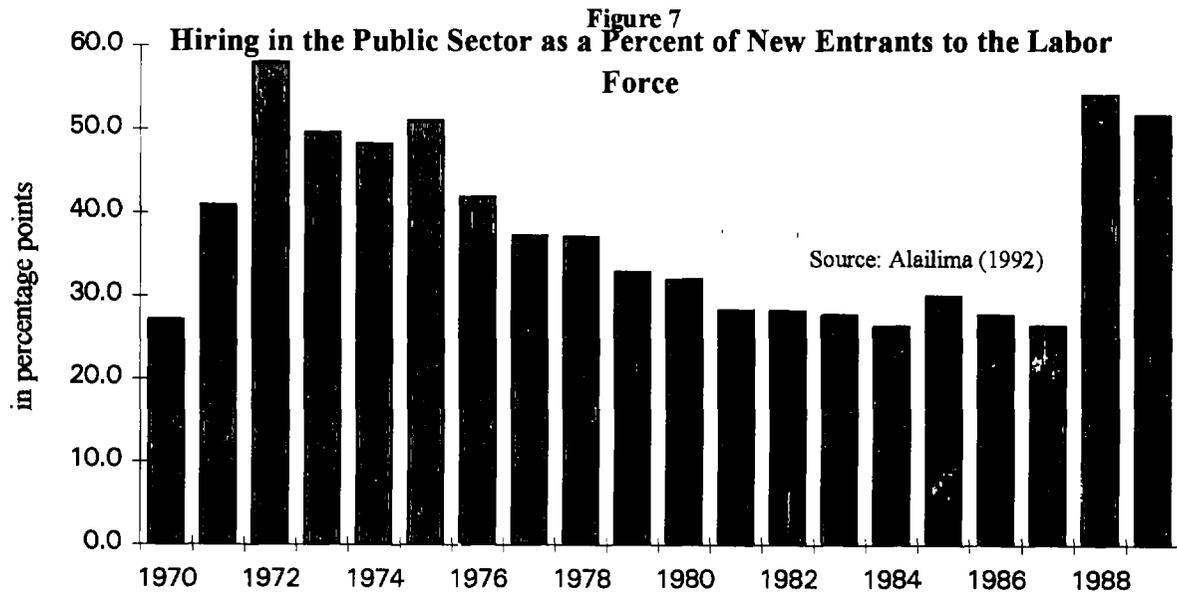
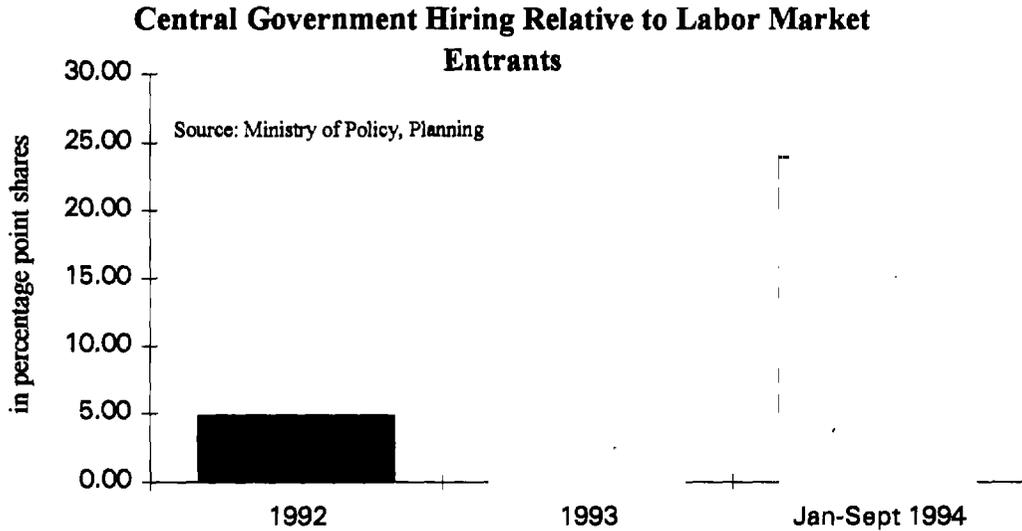


Figure 8



45. Assessment of the mismatch hypothesis. The mismatch hypothesis begins with the observation that the mix of skills demanded by employers does not match those offered by entrants into the labor force. In the strong form of the hypothesis, vacancies for skilled employees stay open for lack of qualified candidates while youth with general educational qualifications ('O' and 'A' level certificates) refuse employment in blue-collar occupations; wages do not rise to persuade 'O' or 'A' level educated youth to accept blue collar employment. An in-depth study by Gunatilleke rejects that strong form of the hypothesis.⁹ He finds that the economy rapidly absorbed 'A' level graduates into blue-collar occupations and industries such as agriculture. Wages in blue-collar occupations (such as agriculture) have apparently risen enough to fill vacancies there. Moreover, there is little evidence of the vacancies for skilled personnel predicted by the strong form of the mismatch hypothesis. Employers told the World Bank team conducting the Private Sector Assessment that they do not face a shortage of qualified labor.¹⁰ It is possible however that the scarcity of qualified candidates and relatively high salaries in the Gulf have raised wages and limited employment of skilled people in Sri Lanka. The weaker forms of the mismatch hypothesis which emphasize aspirations for white-collar employment do not seem worth assessing separately since they merge with the queuing hypothesis.

46. Assessment of the relative price hypothesis. The main policies that would increase the price of labor relative to capital are the 23 percent social security tax and the TEWA. It seems unlikely, however, that these have significantly lowered job growth by inducing the installation of much labor-saving manufacturing equipment. One reason is that manufacturing is concentrated in garments and several other basic industries, and opportunities for choice of manufacturing technology are more limited than if investors could successfully invest in other and more capital-intensive industries. Any tendency toward investment in labor-saving designs to avoid social security tax is probably counterbalanced by the risk of

⁹/ Godfrey Gunatilleke. "The Extent and Nature of the Structural Mismatch in the Domestic Labor Market." Institute of Policy Studies, Research Studies, Employment Series No. 10, 1989.

¹⁰/ World Bank, Sri Lanka: Private Sector Assessment. November 23, 1993.

capital loss because of the civil conflict or changes in government policy. Moreover, there does not seem to be any reason why social security taxes should increase unemployment in the unprotected segment.

47. There might be an incentive to invest in labor-saving technologies to avoid the risk of having to pay large departure payments to downsize under the TEWA. However, several employers report that the TEWA is sometimes avoided by holding workers on short-term contracts --since it is not clear whether the Act applies to these employees. The high turnover that is often reported by garment manufacturers also allows rapid downsizing without payment of large settlements.

48. One argument is that implicit subsidies to capital work in the same direction by raising the price of labor relative to capital. The principal subsidy is freedom from import duty for investors in export industries. The argument lacks force since some manufacturing jobs would probably not exist without the exemption. Moreover, the tariff distorts investment towards an inefficient degree of capital-intensiveness. Therefore the removal of the tariff can be seen as removal of a distortion rather than employment reducing.

49. Assessment of the poverty syndrome hypothesis. The poverty syndrome hypothesis might help explain unemployment among less educated people and poorer people. Nearly half of the unemployed have less than ten years of education and about a third of the unemployed have incomes below a poverty line of Rs 470 per person per month. Some of the unemployed with less than 10 years of education may be searching for protected employment. And some of the poor unemployed may have wealthier relatives who support their job search. Still, unemployment among this group is not easily explained by queuing, since many of these are in rural areas where they are isolated from search for protected segment jobs and since many do not have the minimum educational qualifications for jobs in the protected segment (which is often the 'O' level).

50. A possible explanation for unemployment among the poor is the combination of conditions associated with poverty. Aside from poor education, these are poor health, lack of assets, poor infrastructure (especially roads and water supply) and isolation from sources of information. However these factors are worse in Pakistan and Bangladesh, where unemployment is lower. Despite their poverty, two-thirds of the poor in Sri Lanka are employed: they are poor because of low incomes from employment rather than from unemployment. Research into poverty needs to explain why some of the poor are unemployed while others are not.

51. Explanations of unemployment among women. It would seem unreasonable to explain structural causes of unemployment without accounting for the extraordinary rates of unemployment among women and in particular, among young and educated women (Tables 5 & 6). Indeed, unemployment has become increasingly female as women have rapidly entered the labor force: the female share of unemployment rose from 41 percent in 1980/81 to 52 percent in the last quarter of 1993, when women comprised a third of the labor force.

52. The simplest and most credible explanation for this outcome appears to be the limited mobility of women across occupations.¹¹ The existence of mostly male occupations and industries is an historical and inherited fact in Sri Lanka --which is unlikely to disappear quickly (Table 10). Many occupations are traditionally male: the male/female ratios is 5.8 for plant and machine operators, 4.6 for sales and service workers, and 2.9 for technicians. Much of the expansion of employment over the past decade has been in predominantly or exclusively male occupations --such as the military and police. Therefore, the growth of

¹¹/ Conversation with Godfrey Gunatilleke.

job opportunities for women have been mainly limited to the garment industries, which has massively absorbed women since 1989-90, and in domestic employment abroad (which is not included in the Labor Force Survey measure of unemployment. This is a slight exaggeration as male/female ratios by occupation have been drifting downward over the past few years and women are strongly represented in professional and clerical occupations.

53. The result of limited mobility has been a wage differential against women in many occupations. For instance, data on actual wages in casual labor in agricultural show a consistent differential against women (Figures 9 & 10). Bowen found a wage premium for men of 25 percent relative to women through an econometric estimate that sought to adjust for other determinants of wages, such as education and experience.¹² Lower wages have probably braked the rapid increase in womens' participation in the labor force. Moreover, limited mobility should increase unemployment by increasing length, and hence cost, of job search. About 82 percent of unemployed women have been unemployed for over a year, compared to about 70 percent for men. The limited mobility of women also increases unemployment by increasing unit labor costs. The productivity component of unit labor costs does not reach its potential since some vacancies are not filled by the most productive candidates; the wage component in male dominated occupations is relatively high since competition with women is limited.

<u>Occupations: 1992</u>		<u>Industries: 1990</u>	
Managerial	4.2	Agriculture	1.9
Professional	0.8	Mining	5.6
Technical	2.9	Manufacturing	1.2
Clerical	1.3	Construction	14.6
Sales & Services a/	4.6	Trade	3.6
Agriculture	2.3	Transport & Comm	17.0
Plant & Machine Op.s	5.8	Electricity & Gas	12.0
		Finance	3.2
		Social Service	1.4
Total	2.3	Total	2.0

a/ includes some government jobs such as teachers and military. Source: Dept. of Census, National Planning Department.

¹²/ Bowen, 1990, Annex.

Figure 9
Real Wages in Transplanting of Domestic Paddy
by Gender

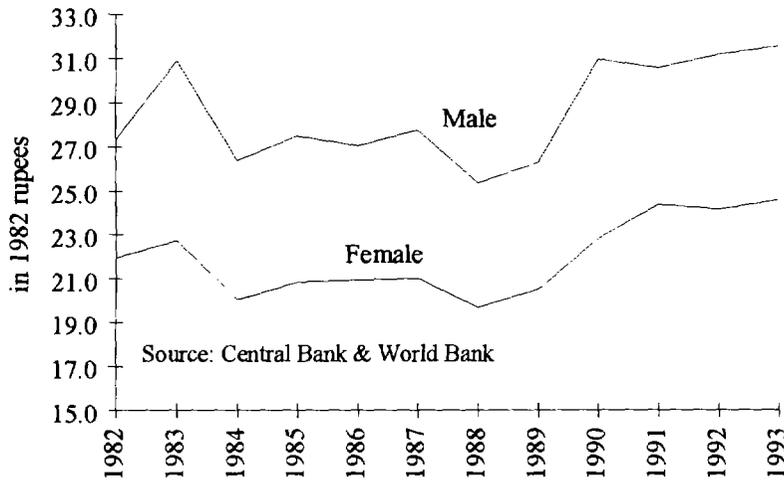
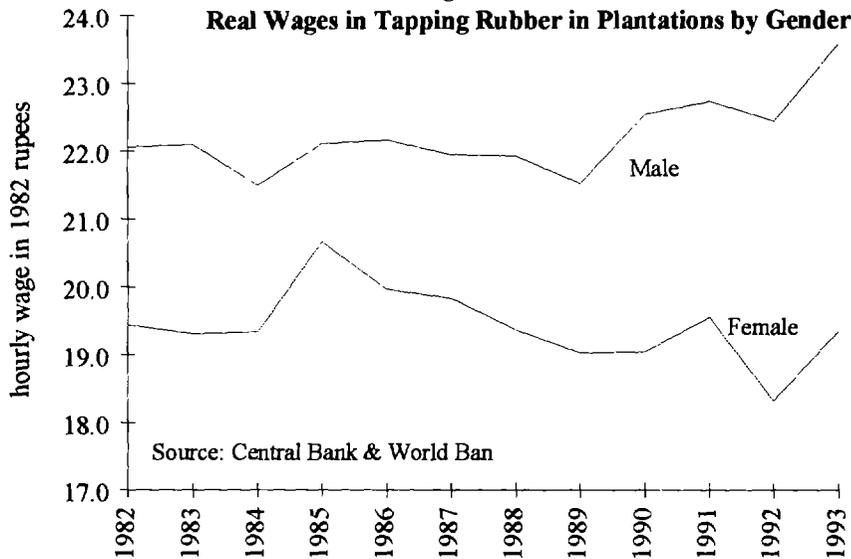


Figure 10
Real Wages in Tapping Rubber in Plantations by Gender



54. An additional possible explanation for the high unemployment rate among women is that the queuing hypothesis applies with greater force for women than for men. The argument would be that families prefer to keep their daughters out of blue-collar employment and especially physical labor, such as paddy. The reason would be to protect the daughter and to enhance her marriageability. Moreover, women may prefer professional and clerical employment in the public sector because wage discrimination is less prevalent. It is difficult to demonstrate that women have a stronger preference for protected sector employment than men, but the hypothesis is consistent with the data showing higher unemployment rates among young women, a longer duration of unemployment for women, lower male/female ratios in the professional and clerical occupations, and with the results of the rapid labor market survey.

55. **Sources of unemployment.** Segmentation thus appears to be the most important structural source of unemployment, especially among women. This explanation merges with weak versions of the mis-match hypothesis that emphasize difference between the supply and demand of skills: youth acquire skills needed for scarce protected segment employment and not those sought by unprotected sector employers. The evidence presented above on gender, age, and education suggests that up to half of unemployment could be associated with segmentation and queuing. The other half does not appear well understood, but may be linked to poverty, and to the limited mobility of women.

56. **Policy options for reducing unemployment.** The implication of the analysis is that policies that reduce segmentation should reduce unemployment. The most important policy to reduce segmentation is to end the practice of occasionally hiring massive numbers of the unemployed into the public sector, which is the leading wedge of the protected segment. Such hiring is an ineffective way to reduce unemployment because it may backfire by encouraging young school-leavers to search for government employment rather than adapt themselves to the needs of private employers and then search for and accept private employment. The occasional and seemingly random nature of massive government hiring encourages unemployment by nurturing the expectation that employment in the Government could be achieved at any time. Extended efforts to find work in the Government also feeds the frustration of youth and can be potentially destabilizing.

Economy	Period	Average growth per year in % points		Percentage share of public sector in increase of total wage employment
		Public	Private	
India	1960-80	4.2	2.1	71
Taiwan, China	1965-85	2.3	6.5	10
Thailand	1963-83	6.3	5.5	33
Sri Lanka	1971-83	8.0	0.9	87

Source: World Bank, *The East Asian Miracle*.

57. If the government hires the unemployed into make-work jobs, squandering the productive potential of human capital may be another consequence. In the worst case, workers in whom a substantial educational investment has been made are paid the relatively high public sector wage to do jobs for which their marginal productivity is zero or even negative --such as the case of hiring secondary school graduates that are not qualified as teachers. In this way creation of make-work jobs impedes the process of accumulation of modern technical competence that is central to education's contribution to economic growth. If the government had not intervened and the labor market were flexible, these same workers would have entered lower-paying occupations, and the consequent increase in the educational level in those occupations would have contributed to an increase in productivity and to an eventual increase in the real wage.

58. Moreover, the practice of suppressing unemployment through public hiring is inherently unsustainable. Hiring obligates a government to pay civil servants salaries and then pensions over long periods and thus complicates the control of government expenditure. The financing of the higher government expenditure raises interest rates and may crowd out investment in the private sector and the therefore the absorption of unemployment by the private sector. In economies such as Taiwan and Thailand rapid growth has been associated with limited growth of government employment (Table 11).

59. Segmentation could also be reduced by limiting differences in job security between the protected and unprotected segment. The most important reform in this regard would be to amend the TEWA, which prevents employers from declaring workers redundant for economic reasons and thus obliges employers to pay large settlements for voluntary departures. These costs discourage hiring in existing enterprises and also discourage employment-creating investment by obliging businesses to bear the risk of paying large settlements. An amendment could set an upper bound to severance pay while providing for a reasonable minimum period of advance notification of severance to the employee. It would also be helpful to explicitly exclude workers on short-term contracts and trainees from coverage of the TEWA. Amendment would increase turnover, but would reduce youth frustration by reducing the duration of employment and giving youth an entry point into employment.

60. Reducing differences between the government and private sector would help reduce segmentation of the labor market. To this end, the government should link public sector wages to private sector comparators. Another measure that would reduce differences between the sectors would be to eliminate any government preference for hiring the unemployed. This would require an end to occasional hiring of groups of unemployed secondary school graduates and limit any possible queuing for government jobs. The measure would also improve the quality of education and reduce fiscal costs by allowing the Ministry of Education to limit its recruitment to qualified teachers that it needs.

61. Unemployment may be worsened by the disruption of war, the creation of refugees, and because of investment that is lost because of the risks posed by the civil conflict. Some of the lost investment would probably have been in capital with long lives and long pay-back periods that would require educated labor. To improve investment and employment, Sri Lankans, should make all reasonable efforts to achieve peace. Although peace will bring medium and long-term benefits for employment, it will bring the short-term challenge of absorbing part of the military and police into civilian employment.

62. Another recommendation is to expand public expenditures in high-return and labor intensive areas such as the maintenance and rehabilitation of roads, along the lines recommended in the Public Expenditure Review.¹³ To avoid increasing the deficit, these activities should be financed by cuts in current expenditures or increased revenues. A sustainable increase in such low-wage employment would support those in low and middle income levels while contributing importantly to long-term development.

63. The Government has found a role in reducing unemployment through vocational education rather than by selecting high-return and labor-intensive expenditures or by breaking down segmentation. The Government should be cautious in expanding vocational training as several statistical studies find that

¹³/ World Bank. Sri Lanka: Public Expenditure Review. No. 12337-CE, December 22, 1993.

vocational education is associated with a lower probability of employment in Sri Lanka.¹⁴ Moreover, many industrial countries have encountered difficulty in increasing employment through training. Inappropriate training would only encourage search for vacancies that do not exist or that the unemployed are not qualified to fill. The fiscal cost of the training and subsidies would have macro-economic consequences for interest rates that could harm employment growth by crowding-out some private investment. The best chances of success would probably arise from a program that shifted resources from government training to private sector training. Such training should assure the commitment of employers and the unemployed by training persons that the private sector is committed to hire and by requiring employer and trainee contributions to the cost.

¹⁴/ Bowen. "The Unemployment Problem in Sri Lanka." 1990, and Terrence Kelly. "Does Vocational Education Enhance Competitiveness in the Labor Market?" Discussion Paper, Employment Policy Unit, Ministry of Policy Planning, August 30, 1993.

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